Attachment 4 – Work Summary Project 1 - NKWSD Calloway Canal Improvements

Current Status of the Project

- Contractors (GEI Consultants, Inc. GEI and Zeiders Engineering) prepared a 100% Final Design package
 on behalf of North Kern Water Storage District (North Kern) and Cawelo Water District (CWD) for
 concrete lining Reach A and Reach B of the Calloway Canal Improvement Project. Reaches A and B are
 ready to be advertised for bid purposes.
- Based on the 100% Final Design package for Reaches A and B, GEI has prepared a 30% Design for Reaches C1, C2, and D that was utilized for cost estimate for this Proposal to line Reaches A-D.
- From May, 2012 to June, 2014, five Federal funding grants have been secured through the Bureau of Reclamation CalFed and WaterSMART programs, totaling \$3,409,500. In 2013, a State of CA Water Use Efficiency grant was secured for Reaches A and B, of \$2,000,000; Total non-local funding secured is \$5,409,500 of which \$3,409,500 is eligible cost match for this Proposal. The total 12,554 linear feet to be lined consists of each Reaches (A, B, C1, C2, and D).
- CEQA is complete for Reaches A-D and NEPA is complete for Reaches A and B. Since Reclamation announced federal funding of Reaches C1, C2, and D in June, 2014, NEPA will be completed in a matter of months for Reaches C1, C2, and D. Reaches B, C1, C2, and D of this Project were accepted into the Metropolitan Bakersfield Habitat Conservation Plan in May, 2014, which resolves any consultation requirements for ESA with USFWS for the remaining reaches to be lined.
- The local district sponsor was on schedule and ready to advertise for bidding for Reaches A and B in March, 2014; however, due to the severity of the drought on local water district revenue from surface water deliveries, the district Board of Directors decided on a delay in advertising the completed bid package to conserve district cash for dry year water purchases, if available.

Category (a) Direct Project Administration (Tasks1, 2, 3 - 10% complete)

<u>Task 1 – Direct Project Administration</u> - GEI will assist with the administration of the Project as required by North Kern to respond to DWR. This includes providing documentation and information to North Kern and compiling information from the LHUD and the City of McFarland on North Kern's behalf, to be in compliance with all DWR reporting requirements. GEI and project consultants have incurred expenses for submitting the grant proposal and will assist North Kern and the project sponsors with support in development of Project Monitoring Plan for the Proposal and for each individual Project.

<u>Task2—Labor Compliance Program</u> – North Kern will subcontract with Quad Knopf to utilize the Department of Industrial Relations (DIR) approved LCP that North Kern has used on Round1 implementation projects. <u>Task 3—Reporting</u> - GEI will provide project updates and information for use in quarterly reports to North Kern.

Deliverables: Support to North Kern for meeting DWR grant funding contract requirements. Quarterly progress reports, Project Final Report, Project Performance Report, and Completion Report to DWR. A Certificate of Project Completion will be submitted in accordance with DWR's requirements. Grant Proposal submitted and support of the Project Monitoring Plan as required by conditions in the grant contract.

Category (b) Task 4 - Land Purchase / Easement (100% complete)

The project is located exclusively within maintained canal rights-of-way or other rights-of-way owned by North Kern.

Deliverable: 100% complete.

Category (c) Planning / Design / Engineering / Environmental Documentation

<u>Task 5 -Assessment and Evaluation (100% complete)</u> — North Kern, Cawelo WD, and other Poso Creek IRWM district completed a System Optimization Review in 2008-2010 that identified the Calloway Canal Improvements as a key component to improve regional conveyance for management of water supplies in dry, normal, and wet periods. Lining 12,554 linear feet of the Calloway Canal effectively completes a new conveyance route from the CA Aqueduct with additional conveyance capacity for connecting water supplies to three districts. Four regional interties have been constructed since 2010 in the Poso Region. This Project is part of the long-term regional conveyance improvements identified in the 2007 IRWM Plan and it is sequenced to be completed following the completion of the four interties serving NK, Cawelo, and Shafter-Wasco ID's service areas.

Task 6-Design – (Reach AB 100%, Reach CD 30% complete)

Design of the project features has been completed for Reaches A and B to the 100 percent Final Design package level. Remaining work is to complete design plans and specification for Reaches C1, C2, and D. Project cost estimates are based on the construction of the CVC to Calloway Canal Intertie, which was completed one mile long canal lining of the same dimensional size and construction methods.

Prepare Plans and Specifications for Bidding Purposes – GEI/Zeiders to complete the plans, specifications, and cost estimates. Perform 90% level review with North Kern Engineer, incorporate all comments, and issue 100% Final Design plans and specifications for bidding purposes for Reaches C1, C2, and D. Prepare updated construction cost estimates based on the Final Design.

- <u>Task 7-Environmental Documentation (50% complete)</u> GEI will support North Kern in providing Reclamation necessary Project information to complete a NEPA document that covers Reaches C1, C2, and D.
- <u>Task 8 Permitting (50% complete)</u> The Project is located exclusively within maintained canal rights-of-way or other rights-of-way owned and operated by North Kern WSD, therefore, completion of permitting and approvals for lining of Reaches A through D are straightforward.
- A pre-activity survey will be ordered and conducted by a qualified biologist shortly before the start of construction; this would include, but is not limited to, protocol-level surveys for the San Joaquin Kit Fox and the Western Burrowing Owl. North Kern will pay MBHCP fees prior to initiating construction.
- The District is not subject to the County's or City's jurisdiction with regard to building and grading permits relative to water resource projects. Accordingly, no City- or County-issued permits will be required.

Deliverables:

- 1) Design documents prepared and approved at the 100% Final Design level for Reaches C1, C2, and D.
- 2) Complete NEQA environmental document process and obtain signed FONSI.
- 3) Complete pre-construction biological survey and MBHCP payment.

Category (d) Construction / Implementation (Tasks9, 10, 11, 12 - Zero% Complete)

- <u>Task 9-Construction Contracting</u>- GEI to assist North Kern and report progress to DWR in obtaining and completing all the necessary project contracts. Bids for construction will be solicited through a competitive bidding process on the basis of final plans and specifications. The language in the standard specifications relating to permitting state "The Contractor is an independent contractor and shall, at his sole cost and expense, comply with all laws, rules, ordinances and regulations of all governing bodies having jurisdiction over the work, obtain all necessary permits and licenses therefore..." This would include, but is not limited to, any required NPDES permitting and the preparation of a Stormwater Pollution Prevention Plan.
- <u>Task 10–Construction</u>- The construction project will involve physical lining of Reaches A through D of the Calloway Canal. The existing canal would be trimmed to provide a canal prism with a 50-foot wide bottom width, 8.5-foot nominal depth and approximately 29-foot sides, 3:1 side slopes. Trimming foundation work and the placement of backfill would be completed with an excavator, loader, and compaction equipment. Concrete lining would place a liner thickness of 4-inches; work would be completed with a self-propelled lining machine. A contract for this task will be awarded to the successful bidder in December 2014.
- <u>Task 11-Environmental Compliance</u>- GEI to ensure environmental compliance in accordance with the CEQA and NEPA documents throughout the construction duration. A certified biologist will perform a preconstruction survey and administer a biological training on-site with the Contractors labor force at the beginning of the project. North Kern will subcontract to Bill Vanherweg to perform these duties.
- <u>Task 12 Construction Administration</u>- Construction Administration activities can generally be categorized as field inspection and contract administration, where the latter includes items such as the Notice to Proceed, pre-construction conference, correspondence with the Contractor, submittal review, progress payments, periodic meetings with the Contractor, Contract Change Orders, etc.

Deliverables:

- 1) Assist North Kern to obtain executed contract agreements for the construction of this Project.
- 2) Assist North Kern to administer bidding process such as job walks, responses to RFI's, and performing a bid review along with a bid recommendation to the North Kern Board of Directors.
- 3) Complete preconstruction survey by certified biologist and subcontractor to perform Contractor labor force biological on-site training.
- 4) Consultant to assist North Kern to perform daily construction inspection services and prepare inspection reports.

Project 2 - Lost Hills Utility District New Well and Water Storage Tank

Current Status of the Project

- LHUD completed a Water System Master Plan (dated January 2014), which was funded by DWR through the Poso Creek IRWM, Round 1 Implementation Grant.
- Contractor (Amando Garza, Cannon Corporation Cannon) is assisting Lost Hills Utility District (LHUD)
 to prepare plans, specifications, and engineer's estimate for two Project components: a new well and a water
 storage tank. Due to limited resources and funding, LHUD cannot commence or fund the larger items
 needed to advance the Project components towards 100% Final Design to be ready for construction bidding.
- In December 2013, following DWR's announcement of the IRWM Round 2 Implementation funding, the Poso Creek RWMG recommended this LHUD project to DWR for technical assistance.
- DWR has developed Task Order No. WRIME-2014-002, technical services to prepare a replacement water storage tank design for LHUD.
- Cannon is providing engineering assistance through LHUD for the new well design and with WRIME on the storage tank design. These efforts are to advance the Project and schedule of the two components to be constructed, the new well and the water storage tank.
- Two construction schedules may need to be contracted one for the new well and one for the reservoir.

NKWSD will be the lead administrative agency and be responsible for preparing and submitting invoices to DWR. LHUD, with the help of its consultant, will manage and administer the project, including coordination of project team, vendors, and contractors. LHUD staff will take the lead in soliciting cost proposals for implementation of the work, for procurement of equipment and material for work to be performed, and managing the construction of all components of the work.

Category (a) Direct Project Administration (Tasks 1, 2, 3-10% complete)

<u>Task 1 – Direct Project Administration</u> - Cannon will assist with the administration of the project as required.

This includes providing documentation and information to the LHUD and North Kern as necessary to be in compliance with all DWR reporting requirements. Cannon is to provide LHUD support for the drought grant application and for the development of Project Monitoring Plan.

<u>Task2—Labor Compliance Program</u> – Cannon will subcontract with Quad Knopf and utilize the Department of Industrial Relations (DIR) approved LCP that North Kern has used on Round1 implementation projects. <u>Task 3—Reporting</u> - Cannon will provide project updates and information for use in quarterly reports to North Kern.

Deliverables: Support to North Kern for meeting DWR grant funding contract requirements. Quarterly progress reports, Project Final Report, Project Performance Report, and Completion Report to DWR. A Certificate of Project Completion will be submitted in accordance with DWR's requirements. Support the drought grant application and complete the Project Monitoring Plan as required by conditions in the grant contract.

Category (b) Task 4 - Land Purchase / Easement (100% complete)

The project is located exclusively within maintained canal rights-of-way or other rights-of-way owned by LHUD. **Deliverable:** 100% complete since acquisition of easement and land purchase is not required.

Category (c) Planning / Design / Engineering / Environmental Documentation

<u>Task 5-Assessment and Evaluation (100 % complete)</u> – Cannon will provide technical support of the new well and coordinate the evaluation of zones to screen for arsenic levels as the pilot well is drilled for the new well; WRIME is providing technical assistance through DWR for the evaluation of the Water Storage Tank and is to utilize the Water System Master Plan completed in October, 2013.

<u>Task 6—Design (30% complete)</u> — Design of the new well will be completed by Cannon for LHUD. Cannon will prepare plans and specifications for drilling and completion of a new well. Cannon will coordinate with Ken Schmidt Associates to define the procedure to be used in the field for selecting the aquifer intervals to screen for the purpose of minimizing arsenic concentrations in the new well. The two existing LHUD wells have continuous screens and were completed many years prior to the lowering of arsenic drinking water standard. WRIME is to develop the Preliminary Engineering Design Report that includes sizing the tank, geotechnical investigation, survey, determining the tank location, type, material, and environmental restrictions, site infrastructure needs and permit requirements, develop construction cost

estimate, list of drawings, and a preliminary design report. WRIME will update the hydraulic analysis, verify utilities, complete structural design, prepare 100% Final Design, including plans and specifications for bidding purposes, and update the construction cost estimate for the water supply tank based on the Final Design.

- <u>Task 7-Environmental Documentation (50% complete)</u> Cannon, will assist LHUD to coordinate with an environmental consultant to conduct an Initial Study for the new well and the water storage tank. It is anticipated the Initial Study will indicate that the Project environmental compliance can be met through the preparation of Mitigated Negative Declaration to comply with CEQA.
- <u>Task 8 Permitting (50% complete)</u> The Project is located exclusively within maintained rights-of-way owned by LHUD, therefore, completion of permitting and approvals for the new well and water storage tank are straightforward as the work will be performed on already disturbed property, not requiring regulatory permits. The permits required relate to typical construction activity, will be identified by Cannon and WRIME in their respective engineering reports, and can be obtained through normal processes. A preactivity survey will be ordered and conducted by a qualified biologist shortly before the start of construction; this would include, but is not limited to, protocol-level surveys for the San Joaquin Kit Fox and the Western Burrowing Owl.

Deliverables:

- 4) Preliminary Engineering Design Report for the water storage tank from WRIME.
- 5) Engineering Design Report for the new well from Cannon.
- 6) 60% and 90% design plans and specification for the water storage tank.
- 7) Design documents at the 100% Final Design for new well and water storage tank.
- 8) Complete CEQA environmental document process and obtain signed NegDec.
- 9) Complete pre-construction biological surveys.

Category (d) Construction / Implementation (Tasks 9, 10, 11 12 – Zero % Complete)

- <u>Task9-Construction Contracting-</u> Cannon to assist the LHUD and report progress to North Kern in obtaining and completing all the necessary project contracts. Bids for construction will be solicited through a competitive bidding process on the basis of final plans and specifications. The language in the standard specifications relating to permitting state "The Contractor is an independent contractor and shall, at his sole cost and expense, comply with all laws, rules, ordinances and regulations of all governing bodies having jurisdiction over the work, obtain all necessary permits and licenses therefore..." This would include, but is not limited to, any required NPDES permitting and the preparation of a Stormwater Pollution Prevention Plan.
- <u>Task 10-Construction</u>- The construction project will involve drilling a pilot well to investigate screen placement for the drilling and completion of a drinking water well; site-prep, earthwork, foundation, construction of a storage tank, interior and exterior coating of the tank, installation of the tank inlet, overflow, and piping connections to distribution system, and construction of the electrical and controls. A contract for this task will be awarded to the successful bidder by January 2015.
- <u>Task 11-Environmental Compliance</u> Cannon is to ensure environmental compliance in accordance with the CEQA documents throughout the construction duration. A certified biologist will perform a pre-construction survey and administer a biological training on-site with the Contractors labor force at the beginning of the project. Cannon will subcontract to a qualified biologist to perform these duties.
- <u>Task 12 Construction Administration</u> Construction Administration activities can generally be categorized as field inspection and contract administration, where the latter includes items such as the Notice to Proceed, pre-construction conference, correspondence with the Contractor, submittal review, progress payments, periodic meetings with the Contractor, Contract Change Orders, etc.
 - Cannon to administer a pre-construction meeting, weekly project meetings, cost and schedule tracking, and coordinate with LHUD.
 - Cannon to perform submittal reviews, respond to project RFI's, and perform daily construction inspection, and prepare inspection reports, and maintain communication with North Kern.
 - Cannon to review, verify, and recommend project change orders and progress payments to LHUD.

Deliverables:

- 1) Cannon to administer bidding process such as job walks, responses to RFI's, and performing a bid review along with a bid recommendation to LHUD.
- 2) Cannon will perform daily construction inspection services, prepare inspection reports, and issue those to LHUD and North Kern.

Project 3 - City of McFarland Browning Road 1.0MG Welded Steel Reservoir, Booster Pump Station, and System Intertie

Current Status of the Project

- Contractor (Dee Jaspar & Associates, Inc. DJA) is preparing plans, specifications, and engineer's estimate
 on behalf of the City of McFarland for a One Million Gallon Storage Reservoir (Tank), Booster Pump
 Station, and System Pipeline Intertie and will provide required grant reporting information.
- The tank site property has been purchased by the City and a water supply well is completed on-site with provisions for the future tank and pumping plant facility. The new water supply well produces 1,500 gpm to 2,000 gpm and the water quality meets all Title 22 Drinking Water Standards.
- Sixty-Percent (60%) level design drawings have been prepared for the Browning Road Reservoir (Tank) and Booster Pump Station Facility. The site piping and site electrical that was constructed as part of the well project was designed to accommodate the addition of the storage tank and pumping station.
- A draft CEQA Initial Study document has been prepared for the Browning Road Tank and Booster Pump Station Facility.

Category (a) Direct Project Administration (Tasks1, 2, 3 - 10% complete)

<u>Task 1 – Direct Project Administration</u> - DJA will assist with the administration of the project as required. This includes providing documentation and information to the City of McFarland and North Kern as necessary to be in compliance with all DWR reporting requirements. DJA is to provide the City support for the drought grant application and for the development of Project Monitoring Plan.

<u>Task2—Labor Compliance Program</u> - DJA will subcontract with Quad Knopf and utilize the Department of Industrial Relations (DIR) approved LCP that North Kern has used on Round1 implementation projects. <u>Task 3—Reporting</u> - DJA will provide project updates and information to North Kern for use in quarterly reports.

Deliverables: Support to North Kern for meeting DWR grant funding contract requirements. Quarterly progress reports, Project Final Report, Project Performance Report, and Completion Report to DWR. A Certificate of Project Completion will be submitted in accordance with DWR's requirements. Support the drought grant application and complete the Project Monitoring Plan as required by conditions in the grant contract.

Category (b) Task 4 - Land Purchase / Easement (10% Complete)

<u>Task 4</u> - The project property is currently owned by the City of McFarland. A water supply well was recently constructed at the proposed site and space provisions made for the construction of a 1.0 MG storage tank and booster pumping station. The site is secured with a 6-ft tall masonry block wall and site landscaping. **Deliverable:** Pipeline easements are required for the system intertie that is to convey the water from the booster pump station to the distribution system to reach all existing service area.

Category (c) Planning / Design / Engineering / Environmental Documentation

<u>Task 5-Assessment and Evaluation (60% complete)</u> - Sixty-percent level design drawings have been prepared for the 1.0MG welded steel tank and booster pump station. Meetings will be held with City Staff to review these plans and evaluate the project components and City needs. DJA will update the hydraulic analysis of the water system for the City of McFarland using a WaterCad hydraulic model to reflect the addition of the storage tank and booster pumping station. System pipeline will be re-evaluated considering the intertie improvements to ensure that the capacity and efficiency of the booster pump station is maximized.

<u>Task 6—Design (30% complete)</u>- Prepare Geotechnical Investigation for the tank pad area that addresses subsurface conditions, provides seismic design criteria for the tank, provides recommendations for allowable bearing pressures, total and differential settlements, lateral bearing pressures, corrosion and expansion characteristics, and general earthwork recommendations.

DJA is to complete the structural design for the tank, the electrical and control plans, and finalize plans, specifications, and estimates for preparation of Final Design package. Perform 90% level review with City Staff, incorporate all comments, and issue 100% Final Design plan and specification set.

Prepare updated construction cost estimates based on the final design. The cost estimate will be within +25% to -15% level of accuracy.

<u>Task 7-Environmental Documentation (50% complete)</u> - Update CEQA document and circulate for 30-day review period through State Clearinghouse. Address comments received. Prepare resolution,

adopt document, and file Notice of Determination (NOD) and pay associated fees.

<u>Task 8 – Permitting (50% complete)</u> - DJA to submit project plans for the site grading plan, tank foundation, tank structure, and electrical for a building permit with the Kern County Building Department. Building permit will be ready prior to issuance of the Notice of Award. DJA to prepare and submit an encroachment permit application to the County of Kern or Caltrans as necessary for the pipeline improvements.

Deliverables:

- 10) Hydraulic analysis completed.
- 11) Plans and Specifications for Bidding Purposes at the 100% Final Design level.
- 12) Complete CEQA environmental document process and obtain signed NOD.
- 13) Submit Project information to the Kern County Building Department.

Category (d) Construction / Implementation (Tasks 9,10,11,12 Zero% complete)

- <u>Task9-Construction Contracting</u>- DJA to assist the City of McFarland and North Kern in obtaining and completing the necessary project contracts to be in compliance with the DWR contract. DJA will assist the City in obtaining executed contract agreements, bonds, and insurance.
- <u>Task 10–Construction</u> The construction project will involve earthwork, construction of a concrete ringwall foundation, construction of a 85-ft diameter by 32-ft tall welded steel storage tank, interior and exterior coating of the tank, installation of cathodic protection, construction of the tank inlet, overflow, and drain piping, construction of a 2,500 gpm booster pump station and construction of the electrical and controls. A contract will be awarded to the successful bidder by February 2015.
- <u>Task 11-Environmental Compliance</u> DJA to ensure environmental compliance in accordance with the CEQA document throughout the construction duration. It is anticipated that a certified biologist will perform a preconstruction survey for the project and administer a biological training on-site with the Contractors labor force at the beginning of the project. DJA intends to subcontract to Live Oak & Associates, Inc. to perform these duties.

Task 12 - Construction Administration

- DJA to administer a pre-construction meeting, weekly project meetings, cost and schedule tracking, and coordinate with City Staff.
- DJA to perform submittal reviews and respond to project RFI's.
- DJA to provide construction staking for survey controls.
- DJA to perform daily construction inspection, concrete testing, compaction testing, welding inspection, prepare inspection reports, and maintain communication with DWR and City Staff. Provide quality assurance and quality control inspections and testing throughout the duration of the project.
- DJA to coordinate project communication with the Construction Foreman and work to resolve issues, answer questions, and aid the completion of the project.
- DJA to review, verify, and approve project change orders and progress payments.
- DJA to assist with project close-out documentation and provide electronic as-builts.

Deliverables:

- 1) DJA to administer bidding process such as job walks, responses to RFI's, and performing a bid review along with a bid recommendation to the City Council.
- 2) DJA will perform daily construction inspection services, prepare inspection reports, and issue those to City Staff and North Kern.